500.37328CX1

## N THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

YOKOGAWA, et al

Serial No.:

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For:

PLASMA PROCESSING SYSTEM AND METHOD

Group:

ıp: 1763

Examiner:

L. Alejandro

## **AMENDMENT**

Commissioner for Patents Washington, D.C. 20231

January 13, 2003

Sir:

The following amendments and remarks are respectfully submitted in connection with the above-identified application in response to the Office Action dated September 11, 2002.

## IN THE SPECIFICATION:

Page 13, please amend the paragraph beginning at line 13 as follows:

In this embodiment of the present invention, a ring-shaped member 12 shown in Fig. 1 is arranged in the periphery of sample 6. Member 12 has a surface made of silicon 13 which is brought into contact with the plasma. The configuration further includes a capacitor 14 to divide the bias applied to sample 6 to apply resultant bias to silicon film 13. Disposed just below member 12 is a temperature controller 15 to keep temperature of member 12 at a fixed value. A silicon wafer as sample 6 is ordinarily covered with a resist mask. The amount of radicals of the plasma incident to the surface of sample 6 is influenced by reaction with the resist mask. Fluorine radicals derived from the plasma of fluorocarbon gas such as C4F8 are consumed through reaction with the resist. The amount of fluorine radicals effectively incident to